IN THE CLAIMS

Applicant submits below a complete listing of the current claims, with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Currently amended) Oscillator circuitry comprising:

a capacitor;

capacitor charging means arranged to supply a current to charge the capacitor to a first predetermined threshold voltage;

capacitor discharging means arranged to discharge the capacitor to a second predetermined threshold voltage; and

switching means arranged to switch between a capacitor discharging mode and a capacitor charging mode responsive to reaching at least one of said threshold voltages, wherein the at least one threshold voltage is determined by a threshold setting means, ~~which provides a voltage threshold which varies~~

said threshold setting means comprising a series combination of at least one diode-connected transistor and a resistor, said threshold setting means setting the second predetermined voltage to compensate for changes in temperature ~~by varying a voltage difference~~ , so as to vary the voltage swing between said first predetermined threshold voltage and said second predetermined threshold voltage to maintain an oscillation frequency substantially independent of temperature.

2. (Currently amended) Circuitry as claimed in claim 1, wherein the threshold setting means further comprises a current source ~~and a resistive means which varies in resistance in dependence upon temperature~~.

3. (Original) Circuitry as claimed in claim 1, wherein the switching means comprises a comparator arranged to monitor voltage across the capacitor and to trigger a change between the discharging and charging modes.

4. (Currently amended) Circuitry as claimed in claim 3, wherein the comparator is connected to a first control transistor which ~~sets~~ selects the first and second predetermined threshold voltages ~~of~~ for charging and discharging the capacitor.

5. (Currently amended) Circuitry as claimed in claim 4, wherein the first control transistor is arranged to selectively by-pass ~~an element of a resistive chain~~ the resistor.

6. (Original) Circuitry as claimed in claim 3, wherein the comparator is connected to a second control transistor which controls current flow to facilitate charging and discharging of the capacitor means.

7. (Currently amended) Circuitry as claimed in claim 2, wherein the ~~resistive~~ threshold setting means comprises more than one ~~or more~~ diode connected transistors.

8. (Original) Circuitry as claimed in claim 1, wherein the capacitor charging means comprises a current source.

9. (Original) Circuitry as claimed in claim 1, wherein the capacitor discharging means comprises a current source.

10. (Currently amended) Oscillator circuitry comprising:

a capacitor;

a capacitor charger arranged to supply a current to charge the capacitor to a first predetermined threshold voltage;

a capacitor discharger arranged to discharge the capacitor to a second predetermined threshold voltage; and

a switch arranged to switch between a capacitor discharging mode and a capacitor charging mode responsive to reaching at least one of said threshold voltages, wherein the at least one threshold voltage is determined by ~~a threshold setting means~~ a series combination of at least one diode-connected transistor and a resistor, said combination setting the second predetermined voltage ~~which provides a voltage threshold which varies~~ to compensate for changes in temperature ~~by varying a voltage difference~~ so as to vary the voltage swing between

said first predetermined threshold voltage and said second predetermined threshold voltage to maintain an oscillation frequency substantially independent of temperature.

11. (Cancelled).

12. (Cancelled).

13. (Previously Presented) The oscillator circuitry of claim 1, wherein a charge and discharge frequency of the capacitor is independent of temperature.

14. (Previously Presented) The oscillator circuitry of claim 3, wherein a comparator output frequency is independent of temperature.

15. (Currently amended) The oscillator circuitry of claim 10, wherein the ~~threshold setting means~~ series combination further comprises a current source ~~and a resistive means which varies in resistance in dependence upon temperature~~.

16. (Previously Presented) The oscillator circuitry of claim 10, wherein the switch comprises a comparator arranged to monitor voltage across the capacitor and to trigger a change between the discharging and charging modes.

17. (Currently amended) The oscillator circuitry of claim 16, wherein the comparator is connected to a first control transistor which ~~sets~~ selects the first and second predetermined threshold voltages ~~of~~ for charging and discharging the capacitor.

18. (Currently amended) The oscillator circuitry of claim 17, wherein the first control transistor is arranged to selectively by-pass ~~an element of a resistive chain~~ the resistor.

19. (Previously Presented) The oscillator circuitry of claim 16, wherein the comparator is connected to a second control transistor which controls current flow to facilitate charging and discharging of the capacitor.

20. (Currently amended) The oscillator circuitry of claim 15, wherein the resistive means comprises more than one ~~or more~~ diode connected transistors.

21. (Previously Presented) The oscillator circuitry of claim 10, wherein the capacitor charger comprises a current source.

22. (Previously Presented) The oscillator circuitry of claim 10, wherein the capacitor discharger comprises a current source.

23. (Cancelled).

24. (Cancelled).

25. (Previously Presented) The oscillator circuitry of claim 10, wherein a charge and discharge frequency of the capacitor is independent of temperature.

26. (Previously Presented) The oscillator circuitry of claim 16, wherein a comparator output frequency does not vary with temperature.

27. (Currently amended) A method of providing an oscillating voltage signal, the method comprising the acts of:

increasing a voltage signal until the voltage signal reaches a first threshold voltage;

decreasing the voltage signal until the voltage signal reaches a second threshold voltage; and

varying a difference between the first threshold voltage and the second threshold voltage, wherein the second predetermined voltage is determined by a series combination of at least one diode-connected transistor and a resistor, the second predetermined voltage is varied in response to changes in temperature to maintain an oscillation frequency substantially independent of temperature.

28. (Previously Presented) The method of claim 27, wherein the act of increasing the voltage signal includes an act of increasing the voltage signal at a rate that varies with temperature.

29. (Previously Presented) The method of claim 27, wherein the act of decreasing the voltage signal includes an act of decreasing the voltage signal at a rate that varies with temperature.

30. (Previously Presented) The method of claim 27, wherein the act of increasing the voltage signal includes an act of charging a capacitor.

31. (Previously Presented) The method of claim 27, wherein the act of decreasing the voltage signal includes an act of discharging a capacitor.